

The Discovery of *Eriopygodes imbecilla* (Fabricius) (Lep.: Noctuidae) as a Resident British Species

By Dr. G. A. NEIL HORTON*

My capture of the first recorded British specimen of *Eriopygodes imbecilla* (Fabricius) on 30th July, 1972 was largely fortuitous. It appeared on the sheet while I was running a mercury vapour light on a hillside in north-west Monmouthshire for the purpose of taking a short series of *Entephria caesiata* (Denis & Schiffermüller) and *Epirrhoe galiata* (Denis & Schiffermüller). Both these species I had found here two nights before, not having previously seen them in Monmouthshire.

The site of my operations was a small sheltered quarry at an altitude of 1,400 ft.

The moth was kindly determined by Mr. John Heath of Monks Wood Experimental Station and Mr. D. S. Fletcher of the British Museum (Natural History).

Being a species new to Britain, the question naturally arose of its status in this country. Was it a migrant or a resident species? If the latter, was it resident at the site of capture or was it a vagrant from elsewhere? I even heard it suggested that the moth must have been transported from the Continent in my car. Neither the car in use that night nor any of my equipment had been outside this country.

The quarry where the moth was taken lay on the 1,400 ft. contour between two distinct types of habitat. Below the level of the quarry there was rough pasture enclosed in stone-walled fields which were partly overgrown by bracken. Above it, rose open moorland having *Calluna vulgaris* (L.) Hull and *Vaccinium myrtillus* (L.) as the dominant plant species. If the moth proved to be a local resident, in which of these two habitats did it originate?

Mr. R. F. Bretherton wrote telling me that he had twice caught the species on the Continent "probably flying by day", and was "fairly sure" he had seen it "flying by day elsewhere at fairly high levels in the Alps — on rushy, marshy ground".

During the winter of 1972 and throughout 1973 I made frequent exploratory visits to the district and, with Mr. Bretherton's helpful information in mind, decided that there were two possible sites worthy of continued investigation. One was a rushy area some half a mile distant from the quarry and at the same altitude. The other was a small mountain bog, overgrown with Sphagnum and rushes, directly above the quarry at an altitude of 1,800 ft. and some 600 yards away. A small stream flowed from it, trickling down, in a series of small waterfalls through a narrow, steep-sided gully to the vicinity of the quarry 400 ft. below. The steep sides of this little "cwm" were clothed mainly with Ling and Bilberry together with a few small patches of Crowberry and Bracken. Alongside the stream, in the floor of the gully, grew various mosses and ferns with a few grasses and the Common Rush.

* Plas Newydd, Usk, Gwent.

The years 1974 to 1975 were lean ones on this mountain-side and despite many visits, both by day and at night, to the quarry and the marshy areas described above, there was no sign of "The Silurian". The weather was often so cold and inclement that even a moth named "imbecilla" could scarcely be expected to fly.

By 1976 I had decided that I could spend my time more profitably than in fruitlessly searching for this elusive moth but in late June, when the daytime temperatures had soared to the high eighties, and more, for nearly a week, I relented and made up my mind to try for it once again. Accordingly, on 26th June, I returned to my quarry with mercury vapour lamp and sheet.

This time my visit was successful. At 10.45 p.m., 15 minutes after commencing operations, I was rewarded by the appearance on the sheet of a fine male specimen of *E. imbecilla*. A second male turned up at 1.15 a.m., but this was damaged and rather worn.

The following night (27th June) again found me running my light at the quarry. I lit up at 10.30 p.m. and a male *E. imbecilla* arrived ten minutes later. By 1.30 a.m. a total of six males and three females had appeared. There were also two males in my Heath trap nearby. Several were in fresh condition but most were somewhat worn and looked as though they had been flying for some time. Among other species, large numbers of *Lycophotia porphyrea* (Denis & Schiffermüller) were also coming to the light and, being only slightly larger than *E. imbecilla*, it is highly probable that some examples of the latter were overlooked as it was impossible to thoroughly scrutinise every moth.

On the Continent, *E. imbecilla* is known sometimes to fly by day. Bearing this in mind, I returned on the afternoon of 29th June and ascended the gully above the quarry. The temperature was well into the eighties with the sun shining directly into the gully. Several species of Lepidoptera were on the wing including, to my delight, *Eriopygodes imbecilla*. In all, nine specimens including both males and females were seen in flight in the hot sunshine between 3.30 p.m. and 5.30 p.m. and I managed to net one of each sex. They were all flying near the floor of the gully over an area 300 yards in extent between the 1,600 ft. and 1,750 ft. contours. I did not see any flying either over the open moorland beyond the confines of the gully, or over the small bog at the head of it.

Their flight which was rapid, low, and direct was not long-sustained, perhaps 30 to 50 feet, and the moths soon settled low down on the herbage which was mostly *Vaccinium myrtillus*. However, I did see one alight on a Rush stem and climb up to the inflorescence a few inches above. Once, I had occasion to brush away a moth which was persistently flying, wings whirring, round my ear and this proved also to be an *imbecilla*.

Other Lepidoptera also flying in the gully at the time included *Boloria selene* (Denis & Schiffermüller), *Coenonympha*

pamphilus (L.), *Ochlodes venata* (Bremer & Grey), *Eulithis populata* (L.), *Xanthorhoe montanata* (Denis & Schiffermüller) and *Parasemia plantaginis* (L.).

I returned to the quarry, yet once again, that evening but no more "Silurians" came either to the m.v. light or the Heath trap. On this occasion there was a good deal of acrid smoke drifting across the hillside from a distant moorland fire. Two specimens of *Syngrapha interrogationis* (L.) appeared, however, and this constituted a new Monmouthshire record.

A further daytime visit on 6th July produced no more examples of *E. imbecilla* nor did a night visit on 8th July when I was joined by Messrs. Austin Richardson and Barry Goater. That night we ran four m.v. lights ranging from high up in the gully to below the quarry.

It would therefore seem that by late June *E. imbecilla* was at the end of its flying period and probably the one which I took on 30th July, 1972 was a late moth in a late season.

Disappointingly two females which I had kept in the hope of obtaining eggs died without producing any.

The foodplant of the species in this country still remains a matter of conjecture. On the Continent the foodplants are given by Lhomme (1923) as "*Stellaria*, *Rumex*, *Artemisia*, *Plantago*, etc.", while Seitz gives "*Stellaria* and other low plants". In the habitat in which I found the moth here, in addition to various mosses, ferns, and grasses, and the dominant species *Calluna vulgaris* (L.) Hull and *Vaccinium myrtillus* (L.) there were also noted *Juncus effusus* (L.) var. *compactus* Hoppe, *Potentilla erecta* (L.), *Viola palustris* (L.), *Galium saxatile* (L.), and *Empetrum nigrum* (L.).

Although its foodplant here still remains to be discovered, there can now be no doubt that *Eriopygodes imbecilla* (Fabricius) is resident in this country, at least in Monmouthshire, and we know that here, as on the Continent, it has a diurnal as well as a nocturnal flight. The usual time of emergence will probably prove to be in June. Furthermore, the type of habitat where it was flying is widespread in the hills of South Wales, so it will surely not be long until it is discovered in other similar localities. Should it prove, however, to be a moth of very local distribution then perhaps the greatest danger to the species will be moorland fires such as were seen this year not very far away from this one known station.

REFERENCES

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